

Before the
Federal Communications Commission
Washington, D.C.

In the matter of:

The proposal to amend Parts 2 and 97 to)
create new frequency bands for the)
Amateur Radio Service in the LF and)
HF ranges) ET 02-98

Comments of Philip E. Galasso, K2PG

In ET 02-98, the Commission discusses the allocation of frequencies in the low frequency (LF) and high frequency (HF) ranges to the Amateur Radio Service on a secondary basis to other radio services currently operating in those frequency bands. I have been an amateur radio operator since 1968, holding the Amateur Extra Class license with the callsign K2PG. I also hold a license in the Experimental Radio Service allowing operation in the LF spectrum under the callsign KA2XUK.

135.7-137.8 kHz

In many countries, amateur radio stations have been permitted experimental operation on the 135.7-137.8 kHz band. I fully concur with the Commission's proposal to allocate this band to the Amateur Radio Service on a secondary basis. The Commission proposes to specify the maximum power permitted on this band in terms of peak envelope power (PEP), rather than effective isotropic radiated power (EIRP). Although this simplifies the proposed rules for operation on this band, I would like to propose that the maximum power be specified in terms of carrier power for emission types that utilize a full carrier and in terms of PEP for emission types that utilize a suppressed or reduced carrier.

160-190 kHz

In ET 02-98, the Commission declines to provide a secondary amateur allocation in this band, citing possible interference to power line carrier (PLC) devices, which currently operate in the 10-1490 kHz band under Section 15.113 of the Commission's Rules.

In Paragraph 7 of ET 02-98, the Commission states, "*In our preparations for the World Administrative Radio Conference 1979, we considered a request from ARRL for an amateur allocation in the 160-190 kHz band under Docket 20271. At that time, we declined to allocate the spectrum to the Amateur Service **because of concerns about interference to the PLCs***". (Emphasis supplied, Report and Order, Docket No. 20271, 70 FCC 2d 1193 (1978))

Concerning Part 15 devices, Paragraph 6 of ET 02-98 states, *“In addition, the LF spectrum is used by unlicensed devices. These systems do not have any allocation status, but are authorized to operate under our Part 15 rules **on an unprotected, non-interference basis** with respect to all other users...Section 15.113 permits power line carrier (“PLC”) systems on power transmission lines for communications important to the reliability and security of electric service to the public in the 10-1490 kHz band.”* (Emphasis supplied)

In declining to allocate 160-190 kHz to a licensed radio service, albeit on a secondary basis, the Commission appears to contradict its own rules, in that it is requiring users of a *licensed* radio service to protect unlicensed devices operating on those frequencies under Part 15. Carrying this precedent to an extreme, does that mean that the Commission should refrain from licensing AM broadcast stations for operation on frequencies below 1490 kHz, since these frequencies may also be used by PLCs? It is incumbent upon the users of Part 15 devices, be they individuals or large corporations, not to interfere with licensed users of the frequencies in question and to accept any and all interference that they may receive from such licensed users.

Nevertheless, I would like to propose that the band 160-190 kHz be allocated to the Amateur Radio Service at a power level not to exceed 200 watts PEP for those emission modes utilizing a suppressed or reduced carrier and 200 watts of carrier power for those emission modes utilizing a full carrier. Due to the long wavelengths involved, few, if any, amateur radio installations will be able to erect antennas providing field strengths sufficient to interfere with PLCs.

5250-5400 kHz

In ET 02-98, the Commission proposes to allocate the band 5250-5400 kHz to the Amateur Radio Service on a secondary basis to the Fixed and Mobile Services. This allocation is highly desirable to the Amateur Radio Service because it provides frequencies suitable for medium-distance communications when the 3500-4000 kHz band is rendered useless due to static and the 7000-7300 kHz band is unsuitable due to the presence of a longer nighttime skip zone and interference from international broadcast stations between 7100 and 7300 kHz.

The Commission proposes to set a maximum power level of 1500 watts PEP output for amateur radio stations in this band. I would like to propose a maximum power level of 1500 watts PEP output for emission modes employing a suppressed or reduced carrier and 1500 watts carrier output for emission modes employing a full carrier. In fact, this would be desirable on all amateur bands except the 10.100-10.150 MHz band and certain VHF/UHF bands in cases where the VHF/UHF stations are located near certain military facilities.

In Paragraph 40 of ET 02-98, the Commission asks if emission subbands should be mandated on the 5250-5400 kHz band. Such subbanding by government fiat serves only to overregulate the Amateur Radio Service. It does not allow for flexibility to choose emission modes according to prevailing usage patterns on the amateur bands. It also tends

to stifle experimentation. The undesirable results of FCC-mandated emission subbands may be heard on the other HF bands. The segments reserved for narrowband emission modes such as CW telegraphy (Class A1A emission) are often lightly used, particularly in the case of the 3500 kHz band. But the segments where wideband modes, such as AM and SSB telephony (Class A3E and J3E emission, respectively), are permitted are often horribly crowded. Subbanding has had the effect of setting up de facto "American-free" zones, in which foreign amateur radio stations may use voice and other wideband modes, but Americans may not. Because wideband modes prevail on the frequencies in question, American stations refrain from using narrowband modes there and the foreign stations will not communicate with Americans using narrowband modes on the frequencies in question. Although the proposed 5250-5400 kHz allocation will be an amateur band only in the United States, the lack of government-mandated emission subbands will give users of this band more freedom to move about to avoid interfering with the fixed and mobile stations that will continue to be the primary users of this band. Currently, the United States is the *only* country in the world that imposes government-mandated emission subbands on its radio amateurs. It is time to amend Section 97.305 of the Commission's Rules to repeal any and all such division of all of our bands into such emission subbands.

Respectfully submitted,

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